

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) ~~[[A]]~~ An image heating device comprising:

a ~~heat generating-section~~ generator that has an outer surface and that generates heat by induction heating;

~~a heating-section-placed~~ heater positioned close to the outer surface of said ~~heat generating-section~~ generator, said heater being configured to heat said ~~heat generating-section~~ generator by induction heating;

~~a positioning-section-placed~~ positioner located close to the an end of said ~~heating section-that-positions~~ heater, said positioner being configured to position said ~~heating section~~ heater with respect to said ~~heat generating-section~~ generator; and

a ~~vibration absorption-section~~ absorber attached to said ~~positioning-section~~ positioner and that ~~absorbs~~ is configured to viscoelastically absorb vibration of said ~~heating-section~~ heater produced by a vibration resulting from an electromagnetic repulsive force acting between said heat generator and said heater when said ~~heating section~~ heater heats said ~~heat generating-section~~ generator by induction heating.

2. (Currently Amended) The image heating device according to claim 1, wherein said ~~heat generating-section~~ generator is provided on a roller having a rotation axis, and the image heating device further comprises a ~~supporting-section~~ support that rotatably supports the rotation axis of said roller ~~in a rotatable manner~~, and

~~said vibration absorption-section-is-placed~~ absorber being positioned between said ~~positioning-section~~ positioner and said ~~supporting-section~~ support.

3. (Currently Amended) The image heating device according to claim 1, wherein said ~~heat generating section is run~~ generator extends between a plurality of rollers each having a rotation axis, and the image heating device further comprises a ~~supporting section support~~ that rotatably supports the rotation axis of the a roller, ~~placed on said heating section side~~ out of said plurality of rollers, that is positioned adjacent the heater in a rotatable manner, and

said ~~vibration absorption section~~ absorber is placed positioned between said ~~positioning section~~ positioner and said ~~supporting section~~ support.

4. (Currently Amended) An image heating device comprising:
a heat generator that has an outer surface and that generates heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator; and

a vibration absorber attached to said positioner that is configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating, wherein:

~~The image heating device according to claim 1, wherein said vibration absorption section~~ absorber is placed positioned between said ~~heating section~~ heater and said ~~positioning section~~ positioner.

5. (Currently Amended) An image heating device comprising:

a heat generator that is provided on a roller having a rotation axis, that has an outer surface, and that generates heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator;

a vibration absorber attached to said positioner, said vibration absorber being configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating; and

~~The image heating device according to claim 2,~~ a support configured to rotatably support the rotation axis of said roller, wherein said supporting-section support and said positioning-section have their positioner have respective outer circumferential surfaces facing each other, and

the respective outer circumferential surfaces of said supporting-section support and said positioning-section positioner are circumferential surfaces along the outer surface of said heat generating-section configured to retain said vibration absorber therebetween to define a circumferential cross-sectional shape of said vibration absorber.

6. (Currently Amended) An image heating device comprising:

a heat generator that extends between a plurality of rollers, each roller having a rotation axis, said heat generator having an outer surface and generating heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator;

a vibration absorber attached to said positioner and that is configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating, and

a support configured to rotatably support the rotation axis of a roller, of the plurality of rollers, that is positioned adjacent said heater, wherein:

~~The image heating device according to claim 3, wherein said supporting section support and said positioning section positioner have their respective outer circumferential surfaces facing each other,~~

~~the respective outer circumferential surfaces of said supporting section support and said positioning section positioner are configured to retain said vibration absorber therebetween to define a circumferential cross-sectional shape of said vibration absorber circumferential surfaces along the outer surface of said heat generating section.~~

7. (Currently Amended) An image heating device comprising:

a heat generator that has an outer surface and that generates heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator;

a vibration absorber attached to said positioner and that is configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating; and

~~The image heating device according to claim 1, further comprising a current supplying section~~ supply that supplies an exciting current having a predetermined frequency to said ~~heating section~~ heater and causes said ~~heating section~~ heater to perform induction heating, wherein:

~~wherein said vibration absorption section~~ absorber absorbs vibration caused by a vibration force having a frequency approximately double the frequency of said exciting current.

8. (Currently Amended) An image heating device comprising:

a heat generator that has an outer surface and that generates heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator; and

a vibration absorber attached to said positioner and that is configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating; and

~~The image heating device according to claim 1, further comprising a current supplying section~~ supply that supplies an exciting current modulated with a ripple component having a predetermined frequency to said ~~heating section~~ heater and causes said ~~heating section~~ heater to perform induction heating, wherein

wherein said vibration ~~absorption section~~ absorber absorbs vibration caused by a vibration force having substantially the a same frequency as the frequency of said ripple component.

9. (Currently Amended) The image heating device according to claim 1, wherein said vibration ~~absorption section is made of~~ absorber comprises a material ~~whose~~ with a vibration absorption performance that exceeds a predetermined level at an arbitrary operating temperature.

10. (Currently Amended) The image heating device according to claim 7, wherein said vibration ~~absorption section is made of~~ absorber comprises a material ~~whose~~ with a vibration absorption performance that exceeds a predetermined level ~~in an area of frequency being equal to or lower~~ for frequencies not greater than approximately double the frequency of said exciting current.

11. (Currently Amended) The image heating device according to claim 8, wherein said vibration ~~absorption section is made of~~ absorber comprises a material ~~whose~~ with a vibration absorption performance that exceeds a predetermined level ~~in an area of frequency being~~ for frequencies substantially equal to or lower than the frequency of said ripple component.

12. (Currently Amended) The image heating device according to claim 7, wherein said vibration ~~absorption section is made of~~ absorber comprises a material

P24949.A04

having a characteristic that the frequency corresponding to maximum vibration absorption performance is ~~equal to or lower~~ not greater than approximately twice the frequency of said exciting current.

13. (Currently Amended) The image heating device according to claim 8, wherein said vibration ~~absorption section is made of~~ absorber comprises a material having a characteristic that the frequency corresponding to maximum vibration absorption performance is substantially equal to or less than the frequency of said ripple component.

14. (Currently Amended) An image heating device comprising:
a heat generator that has an outer surface and that generates heat by induction
heating;
a heater positioned close to the outer surface of said heat generator, said heater
being configured to heat said heat generator by induction heating;
a positioner located close to an end of said heater, said positioner being
configured to position said heater with respect to said heat generator; and
a vibration absorber attached to said positioner and that is configured to absorb
vibration of said heater produced when said heater heats said heat generator by
induction heating, wherein:

~~The image heating device according to claim 9, wherein said vibration absorption~~
~~section is made of~~ absorber comprises a material with a vibration absorption
performance that exceeds a predetermined level at an arbitrary operating temperature,
the material having a characteristic that a loss factor at an arbitrary operating
temperature is approximately 0.01 or ~~above~~ more.

15. (Currently Amended) The image heating device according to claim 10, wherein said vibration ~~absorption section is made of~~ absorber comprises a material having a characteristic that a loss factor is approximately 0.01 or ~~above in an area of~~ frequency being more for frequencies equal to or lower than approximately twice the frequency of said exciting current.

16. (Currently Amended) The image heating device according to claim 11, wherein said vibration ~~absorption section is made of~~ absorber comprises a material having a characteristic that a loss factor is approximately 0.01 or ~~above in an area of~~ frequency being more for frequencies substantially equal to or less than the frequency of said ripple component.

17. (Currently Amended) An image heating device comprising:
a heat generator that has an outer surface and that generates heat by induction
heating;

a heater positioned close to the outer surface of said heat generator, said heater
being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being
configured to position said heater with respect to said heat generator;

a vibration absorber attached to said positioner and that is configured to absorb
vibration of said heater produced when said heater heats said heat generator by
induction heating, and

~~The image heating device according to claim 1, further comprising a pressing~~
~~section~~ a presser that presses said ~~heating section~~ heater in a direction in which said
~~heating section~~ heater approaches said ~~heat generating section~~ generator.

18. (Currently Amended) An image heating device comprising:

a heat generator that has an outer surface and that generates heat by induction heating;

a heater positioned close to the outer surface of said heat generator, said heater being configured to heat said heat generator by induction heating;

a positioner located close to an end of said heater, said positioner being configured to position said heater with respect to said heat generator;

a vibration absorber attached to said positioner and that is configured to absorb vibration of said heater produced when said heater heats said heat generator by induction heating, and

~~The image heating device according to claim 1, further comprising a regulating section a regulator that regulates the moving direction of said heating-section heater to move only in a direction in which said heating-section heater approaches said heat generating-section generator or in a direction in which said heating-section heater retracts goes away from said heat generating-section generator.~~